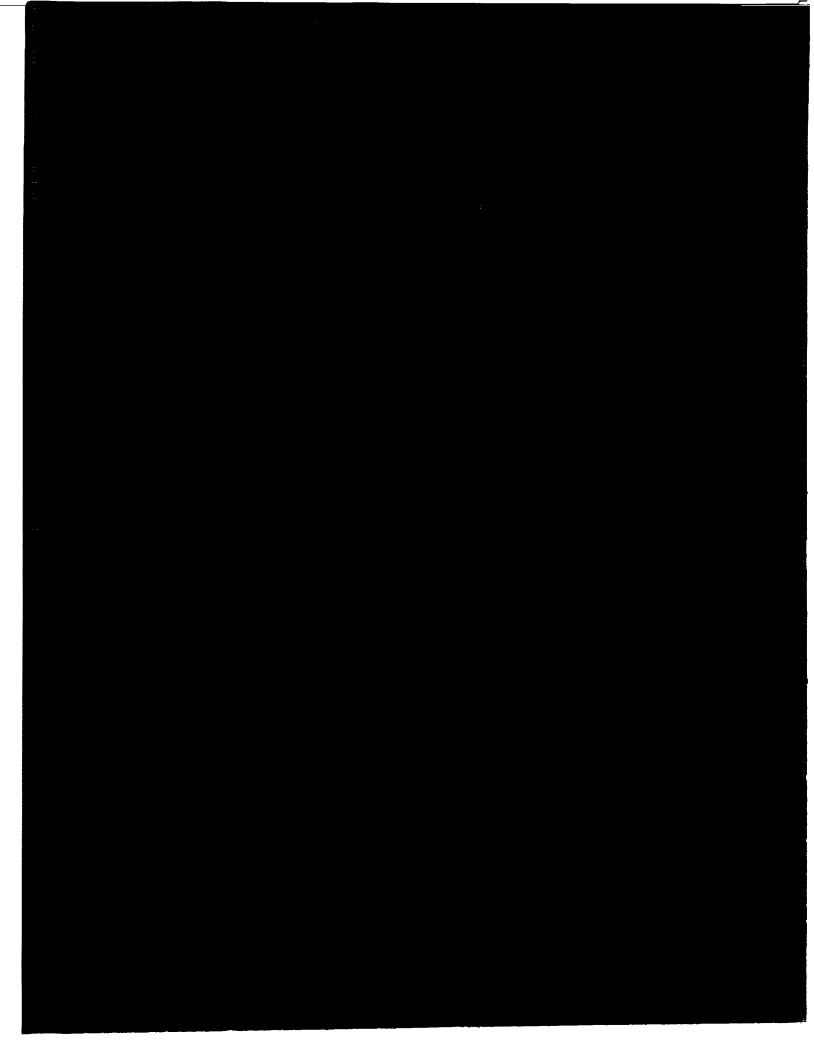
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The Airline Quality Rating 2001

Brent D. Bowen Dean E. Headley

April 2001

UNO Aviation Institute University of Nebraska at Omaha Omaha, NE 68182-0508

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Brent Bowen is Director and Professor, Aviation Institute, University of Nebraska at Omaha. He has been appointed as a Graduate Faculty Fellow of the University of Nebraska System-wide Graduate College. Bowen attained his Doctorate in Higher Education and Aviation from Oklahoma State University and a Master of Business Administration degree from Oklahoma City University. His Federal Aviation Administration certifications include Airline Transport Pilot, Certified Flight Instructor, Advanced-Instrument Ground Instructor, Aviation Safety Counselor, and Aerospace Education Counselor. Dr. Bowen's research interests focus on aviation applications of public productivity enhancement and marketing in the areas of service quality evaluation, forecasting, and student recruitment in collegiate aviation programs. He is also well published in areas related to effective teaching. His professional affiliations include the University Aviation Association, Council on Aviation Accreditation, World Aerospace Education Association, International Air Transportation Research Group, Aerospace Education Association, Alpha Eta Rho International Aviation Fraternity, and the Nebraska Academy of Science. He also serves as program director and principal investigator of the National Aeronautics and Space Administration funded Nebraska Space Grant Consortium.

Dean Headley is Associate Professor of Marketing and Barton Fellow, W. Frank Barton School of Business, and Faculty Associate of the National Institute for Aviation Research at Wichita State University. He holds a Doctorate in Marketing and Statistics from Oklahoma State University, a Master of Business Administration Degree from Wichita State University, and a Master of Public Health Degree from the University of Oklahoma. Dr. Headley's research interests include methodology development for measurement of service quality, the connection between service quality and consumer behavior, consumer choice processes in service settings, and the effects of marketing activities on consumers and providers of services.

Dr. Bowen's and Dr. Headley's research on the Airline Quality Rating (AQR) has met with national and international acceptance and acknowledgment. The Airline Quality Rating has been featured on *ABC's Good Morning America, The Cable News Network, The Today Show, C-Span,* on network news, in *USA Today,* in *Aviation Week and Space Technology,* and in numerous other national and international media. Bowen and Headley have served as invited expert witnesses before the U.S. House of Representatives Committee on Government Operations and have served as invited speakers and panelists for such groups as the National Academy of Sciences/Transportation Research Board. The work of Bowen and Headley has been recognized with awards from the American Marketing Association, the American Institute of Aeronautics and Astronautics, Embry-Riddle Aeronautical University, the Travel and Transportation Research Association, and others. The AQR research has been published in the Journal of Aviation/Aerospace Education and Research, Journal of Air Transportation World Wide, as well as other journals, proceedings, textbooks, and research monographs.

AIRLINE QUALITY RATING 2001

Brent D. Bowen, University of Nebraska at Omaha Dean E. Headley, Wichita State University

Abstract

The Airline Quality Rating (AQR) was developed and first announced in early 1991 as an objective method of comparing airline quality on combined multiple performance criteria. This current report, Airline Quality Rating 2001, reflects monthly Airline Quality Rating scores for 2000. AQR scores for the calendar year 2000 are based on 15 elements that focus on airline performance areas important to air travel consumers.

The Airline Quality Rating 2001 is a summary of month-by-month quality ratings for the ten major U.S. airlines operating during 2000. Using the Airline Quality Rating system of weighted averages and monthly performance data in the areas of on-time arrivals, involuntary denied boardings, mishandled baggage, and a combination of 12 customer complaint categories, major airlines comparative performance for the calendar year of 2000 is reported. This research monograph contains a brief summary of the AQR methodology, detailed data and charts that track comparative quality for major airlines domestic operations for the 12-month period of 2000, and industry average results. Also, comparative Airline Quality Rating data for 1999 are included for each airline to provide historical perspective regarding performance quality in the industry.

The Airline Quality Rating (AQR) System

The majority of quality ratings available rely on subjective surveys of consumer opinion that are infrequently done. This subjective approach yields a quality rating that is essentially non-comparable from survey to survey for any specific airline. Timeliness of survey-based results can be a problem in the fast-paced airline industry as well. Before the Airline Quality Rating, there was effectively no consistent method for monitoring the quality of airlines on a timely, objective, and comparable basis. With the introduction of the AQR, a multi-factor, weighted average approach became available that had not been used before in the airline industry. The method relies on taking published, publicly available data that reports actual airline performance on critical quality criteria important to consumers and combines them into a rating system. The final result is a rating for individual airlines with interval scale properties that is comparable across airlines and across time.

The Airline Quality Rating (AQR) is a weighted average of multiple elements (see Table 1) important to consumers when judging the quality of airline services. Elements considered for inclusion in the rating scale were screened to meet two basic criteria; 1) an element must be obtainable from published data sources for each airline; and 2) an element must have relevance to consumer concerns regarding airline quality. Data for the elements used in calculating the ratings represent performance aspects (on-time arrival, mishandled baggage, involuntary denied boardings, and 12 customer complaint

areas) of airlines that are important to consumers. All of the elements are reported in the Air Travel Consumer Report maintained by the U.S. Department of Transportation.

Weights were established by surveying 65 airline industry experts regarding their opinion as to what consumers would rate as important (on a scale of 0 to 10) in judging airline quality. Also, each weight and element was assigned a plus or minus sign to reflect the nature of impact for that criterion on a consumer's perception of quality. For instance, the criteria of on-time arrival performance are included as a positive element because it is reported in terms of on-time successes, suggesting that a higher number is favorable to consumers. The weight for these criteria is high due to the importance most consumers place on this aspect of airline service. Conversely, the criteria that includes mishandled baggage is included as a negative element because it is reported in terms of mishandled bags per passengers served, suggesting that a higher number is unfavorable to consumers. Because having baggage arrive with passengers is important to consumers the weight for this criteria is also high. Weights and positive/negative signs are independent of each other. Weights reflect importance of the criteria in consumer decision-making, while signs reflect the direction of impact that the criteria should have on the consumer's rating of airline quality. When all criteria, weights and impacts are combined for an airline and averaged over the year, a single interval scaled value is obtained. This value is comparable across airlines and across time periods.

The Airline Quality Rating criteria and the weighted average methodology allow a very focused comparison of major airline domestic performance. Unlike other consumer opinion approaches that rely on consumer surveys and subjective opinion, the AQR continues to use a mathematical formula that takes multiple weighted objective criteria into account in arriving at a single, fully comparable rating for airline industry performance. The Airline Quality Rating provides both consumers and industry watchers a means for looking at comparative quality for each major airline on a timely basis, using objective, performance-based data. Over the years, the Airline Quality Rating has often been cited as an industry standard for comparing airline performance. With the continued global trend in airline operations alliances, the argument becomes even stronger for the Airline Quality Rating to be used as a standard method for comparing the quality of airline performance for international operations as well.

Table 1

AIRLINE QUALITY RATING CRITERIA, WEIGHTS AND IMPACT

	CRITERIA	WEIGHT	IMPACT (+/-)
ОТ	On-Time	8.63	+
DB	Denied Boardings	8.03	
MB	Mishandled Baggage	7.92	
CC	Customer Complaints Flight Problems Oversales Reservations, Ticketing, an Fares Refunds Baggage Customer Service Disability Advertising Tours Animals Other	7.17 d Boarding	

Data for all criteria is drawn from the U.S. Department of Transportation's monthly *Air Travel Consumer Report*. (http://dot.gov/airconsumer/)

The formula for calculating the AQR score is:

$$AQR = \frac{(+8.63 \times OT) + (-8.03 \times DB) + (-7.92 \times MB) + (-7.17 \times CC)}{(8.63 + 8.03 + 7.92 + 7.17)}$$

What the Airline Quality Rating Tells Us About 2000

The Airline Quality Rating industry average score shows an industry that is declining in quality relative to customer performance criteria. Alaska Airlines, Delta Airlines, and US Airways were the only airlines to show improvement in their overall AQR scores for 2000. American Airlines was most constant from 1999 to 2000, with only a slight decrease in their AQR score. America West Airlines registered the largest decline in AQR score. Continental, Northwest, Southwest, Trans World, and United all declined as well, but at more moderate levels. In all, seven of the ten airlines rated posted lower AQR scores in 2000 than in 1999. The AQR results for 2000 indicate that:

- * For 2000 the overall industry average AQR score was lower than in 1999. As an industry, the AQR criteria shows that on-time arrival percentage declined (72.6% in 2000 compared to 76.1% in 1999), involuntary denied boardings per passenger served increased (1.04 per 10,000 passengers in 2000 compared to 0.88 per 10,000 passengers in 1999), mishandled baggage rates worsened (5.29 per 1,000 passengers in 2000 versus 5.08 per 1,000 passengers in 1999), and consumer complaint rates increased (2.98 per 100,000 passengers in 2000 compared to 2.48 per 100,000 passengers in 1999).
- * Alaska Airlines had the most improved AQR score of the ten airlines rated. Their improvement in mishandled baggage rate for the year was very noticeable (from 5.75 in 1999 to 3.48 in 2000), and is the best in the industry for 2000. On the down side, Alaska Airlines had lower on-time performance, a higher consumer complaint rate, and a higher denied boarding rate in 2000 than in 1999.
- * America West Airlines had the largest decline in AQR score of all the airlines rated. On-time performance dropped by 4% in 2000. Mishandled baggage rate increased (from 4.52 in 1999 to 6.62 in 2000) to a level that was highest in the industry. Consumer complaints nearly doubled to reach a level 2.5 times the industry average rate, the highest in the industry. On a positive note, denied boarding rates improved in 2000 to 1.12 per 10,000 passengers served.
- * American Airlines' AQR score for 2000 had the least change from 1999 of all airlines. Their drop in AQR score reflects slightly lower levels of performance for on-time arrivals, mishandled bags, and customer complaints. A nearly steady performance in involuntary denied boarding rates was not enough to offset declines in other performance areas and reduced their overall score a small amount.
- * Continental Airlines showed a 34% decrease in AQR score for 2000, falling from second in the rankings to seventh. Better performance in on-time arrivals (one of only two airlines to improve in this area) was not enough to offset poor performance in the areas of mishandled baggage, involuntary denied boardings, and customer complaints. Continental's denied boardings rate was over five times worse in 2000 than in 1999.

- * Delta Airlines' AQR score for 2000 had the second largest improvement of all airlines, even with declines in performance for on-time arrivals, mishandled bags, and customer complaints. The bright spot for Delta was a sizeable improvement (2000 rate is only 25% of 1999 rate) in denied boarding rate. With most of the other airlines showing performance declines, Delta moved up to the top position for 2000.
- * Northwest Airlines posted a decline in AQR score for 2000. An improvement in customer complaint rate was not enough to offset declining performance in on-time arrival percentage, mishandled baggage rate, and a three-fold increase in involuntary denied boardings rate for 2000.
- * Southwest Airlines performance in 2000 took them from the top position in 1999 to the third rated carrier in 2000. They recorded the second largest decrease (4.8%) in on-time arrival percentage of the ten airlines. Involuntary denied boarding rates, mishandled baggage rates, and customer complaint rates were all worse in 2000. At a time when industry customer complaint rates (2.98 per 100,000 passengers in 2000) are climbing, Southwest has, by far, the lowest rate of any of the ten major carriers (0.47 per 100,000 passengers).
- * Trans World Airlines held steady in 2000 in one area, customer complaints. On-time arrivals and mishandled baggage rates got worse. Involuntary denied boardings grew by nearly 350% in 2000 to become the industry's worst. On-time performance (76.9%) was the third best in the industry for the year.
- * United Airlines had the lowest on-time arrival percentage of the airlines rated (61.4%), and posted the second largest decline in AQR score of all airlines. Performance regarding denied boardings and number of complaints per passenger served worsened. Consumer complaints doubled (100% increase) in 2000. United improved their mishandled baggage rate for 2000, but was still the second worst performer among the ten major carriers.
- * US Airways was one of only three airlines to improve their AQR score in 2000. Looking at some of the details reveals that US Airways performed better in on-time arrival percentage, mishandled baggage rate, and customer complaint rate. The rate of involuntary denied boardings was the only area that US Airways recorded poorer performance in 2000.

Observations About the Industry

Even with a promise to do better, industry performance quality, as measured by the Airline Quality Rating, declined in 2000. With Congress again considering the passage of an Airline Passengers' Bill of Rights it seems that the airline industry is its own worst enemy. The DOT Inspector General's report issued in mid-February outlines how the airlines failed to deliver on their self-policed promise to do better in customer

service areas. Generally, the consumer wants to be treated with more respect and receive more reliable service. Many think it may take an act of Congress to exact this from the airlines.

The most recent FAA forecast estimates that passenger volume growth between 2001 and 2012 will be approximately 3.6% annually. Regional carrier growth is expected to be slightly higher, at 5.6% annually. International passenger volume is projected to grow approximately 6.1% worldwide. At these rates, system saturation and failure is a reality in the very near future. Air carriers, airports, and the FAA must work quickly and cooperatively to prevent this operational failure.

Qualitative assessment of consumer experiences indicates an increasing frequency of consumer/employee confrontations that clearly stem from management policies and practices that encourage misinformation regarding flight status information and flight delays. In addition, seat allocation policies (regarding price, bumped, standby) often make non-frequent flyer club members an afterthought passenger. Under the guise of efficiency, some airlines do not provide courtesy boarding to elderly, physically impaired, or those with children; they limit carry-on baggage to unreasonable requirements, do not allow a consumer to take an earlier connection when a seat is available, have increased change of ticket fees, limit use of child safety seats, block access to window and aisle seats based on ticket price and standing in a frequent flyer club, and change frequent flyer benefits to a level of worthless value. The recent report from the Office of Inspector General, DOT chronicles the fact that airline promises to improve customer service are not being kept. The many anti-consumer oriented rules developed recently to enhance perceived productivity at the expense of consumer comfort and convenience have resulted in consumer retaliation, as evidenced by increasing complaints to the Department of Transportation.

The FAA reports that about one in five flights are now provided by so-called low-cost carriers. Market share for these carriers has increased to 10% of all passengers flown. Approximately 81% of all U.S. adults have flown as an airline passenger. The competitive combination of low cost carriers, major airlines, and regional carriers has provided access to air travel to the majority of our population. This access has come as a result of fierce competition, and possibly predatory pricing tactics, by airlines. Many Americans now regard air travel as a right. Care must be taken to ensure that access is maintained and that profit does not become the sole criteria for capacity allocation.

The national air transportation system has reached capacity at peak operating times. Travelers face personally disastrous situations regularly, and long term prospects only seem to worsen the economic impact for all. Airlines are increasingly using small capacity airplanes that use valuable slots, reducing the seat capacity available to serve increasing consumer demand. Airports are allowing over-scheduling that exceeds landing/takeoff capacity in peak times, guaranteeing delays. While gridlock is most probable at the largest and most heavily used airports (approximately 40 in the U.S.), capacity does exist elsewhere that is underutilized and possibly better served by the

smaller regional jet (RJ) equipment. Given the complexity of the problem, lack of desire by the airlines to help themselves and the consumer, and the need to better utilize public resources, government intervention seems necessary and appropriate.

The FAA must accept some blame in failing to meet the traveling public's needs. Not effectively modernizing the National Airspace System with up-to-date technology, not expediting the implementation of GPS navigation and approaches, free-flight, ground incursion management, data-link and other enhancements to handling increased capacity have contributed to the congested system consumers now suffer. The Air Transport Organization management structure must be given support and funding.

Profitability in the industry remains good due to increasing demand, cost efficient on-line reservation systems, and higher fare prices. Higher fuel costs have seriously hampered profit growth, but are being managed proactively. Labor issues will be big in 2001 as labor negotiations come due for nearly all of the major domestic airlines. When employees are in disagreement with management it is reasonable to assume that employees will express their dissatisfaction in ways that affect consumers and the bottom line.

Continuing decline in industry service quality should be regarded as a primary reason to oppose the current mergers and acquisitions being proposed. There is no evidence to support that carrier's party to these discussions have effectively managed the current operational environment effectively and efficiently. Consequently, we cannot assume that doubling the size of the operation will enhance management's operational efficiency. There is little reason, either managerially, competitively, or fiscally, for the country to support industry consolidation without clear considerations regarding pricing, better airline cooperation, consumer service concerns, and the loss of competitive options.

Since first issuing the Airline Quality Rating in 1991, airline performance quality has had some up and down years. From 1991 through 1994 the AQR scores showed declining performance for the industry. During the financially turbulent years 1995 through 1997, airline quality turned upward, showing improvements each year in the AQR scores for the industry. Since 1997, quality has returned to a downward trend, with lower industry AQR scores each year. As one might expect, individual airlines have had variations in their level of performance as well. Either Southwest ('93, '95, '96, '97) or American ('91, '92, '94) was rated as the best performer from 1991 through 1997. In 1998 US Airways took the lead, with Southwest again in 1999 and Delta in 2000 being rated the best. Over the years, the Airline Quality Rating has given the flying public a means to quantify the general decline in air travel service quality. The AQR chronicles the air traveler's frustration with a system that is fractured and near a breaking point.

Previous Airline Quality Reports

Bowen, Brent D., Dean E. Headley and Jacqueline R. Luedtke (1991), <u>Airline Quality Rating</u>, National Institute for Aviation Research Report 91-11, Wichita, Kansas.

Bowen, Brent D., and Dean E. Headley (1992), <u>Airline Quality Rating Report 1992</u>, National Institute for Aviation Research Report 92-11, Wichita, Kansas.

Bowen, Brent D., and Dean E. Headley (1993), <u>Airline Quality Rating Report 1993</u>, National Institute for Aviation Research Report 93-11, Wichita, Kansas.

Bowen, Brent D., and Dean E. Headley (1994), <u>Airline Quality Rating Report</u> 94, National Institute for Aviation Research Report 94-11, Wichita, Kansas.

Bowen, Brent D., and Dean E. Headley (1995), <u>Airline Quality Rating Report 1995</u>, National Institute for Aviation Research Report 95-11, Wichita, Kansas.

Bowen, Brent D., and Dean E. Headley (1996), <u>Airline Quality Rating 1996</u>, W. Frank Barton School of Business, Wichita, Kansas.

Bowen, Brent D., and Dean E. Headley (1997), <u>Airline Quality Rating 1997</u>, W. Frank Barton School of Business, Wichita, Kansas.

Bowen, Brent D., and Dean E. Headley (1998), <u>Airline Quality Rating 1998</u>, W. Frank Barton School of Business, Wichita, Kansas.

Bowen, Brent D., and Dean E. Headley (1999), <u>Airline Quality Rating 1999</u>, W. Frank Barton School of Business, Wichita, Kansas.

Bowen, Brent D., and Dean E. Headley (2000), <u>Airline Quality Rating 2000</u>, W. Frank Barton School of Business, Wichita, Kansas.

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Detail of Airline Performance

Since the Airline Quality Rating is comparable across airlines and across time, monthly rating results can be examined both individually and collectively. The following pages outline the AQR scores for the industry and for each airline, by month for 2000. For comparison purposes, results are also displayed for 1999. A composite industry average chart that combines the ten airlines tracked is shown at first, with individual airline performance charts following in alphabetical order.

Airline Quality Rating Average AQR Scores*

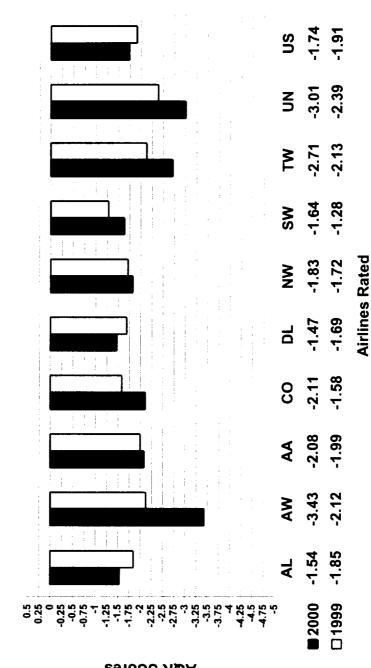
	2000 AQR Score	Rank	1999 AQR Score	Rank	1998 AQR Score	Rank
Alaska	-1.54	7	-1.85	5	-2.08	œ
America West	-3.43	9	-2.12	æ	-1.54	9
American	-2.08	9	-1.99	7	-1.26	က
Continental	-2.11	7	-1.58	2	-1.07	7
Delta	-1.47		-1.69	က	-1.37	4
Northwest	-1.83	5	-1.72	4	-2.08	6
Southwest	-1.64	က	-1.28	-	-1.41	5
Trans World	-2.71	80	-2.13	6	-2.08	7
United	-3.01	6	-2.39	10	-2.16	10
U.S. Airways	-1.74	4	-1.91	9	-0.86	
Industry	-2.05		-1.85		-1.61	

^{*}Average AQR scores are based on monthly AQR score calculations using the AQR weighted average method. The calendar year is used and monthly AQR scores are totaled and divided by 12 to arrive at the average AQR score for the year.

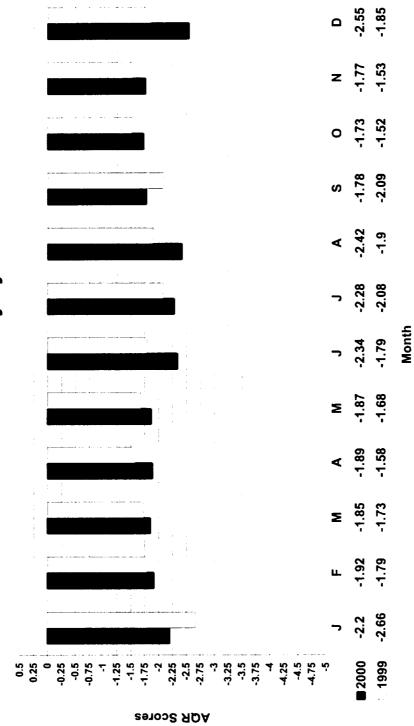
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Airline Quality Rating

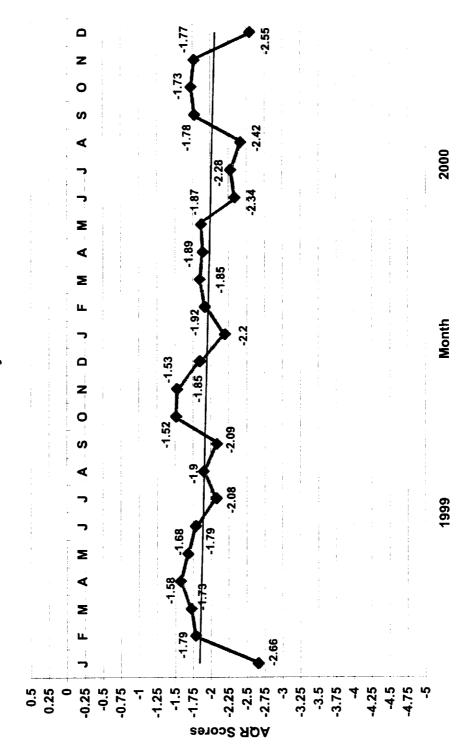
Average AQR Scores by Airline



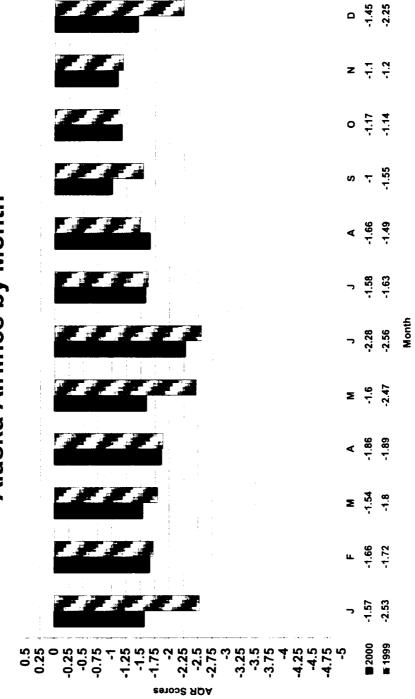
Airline Quality Rating
U.S. Airline Industry by Month



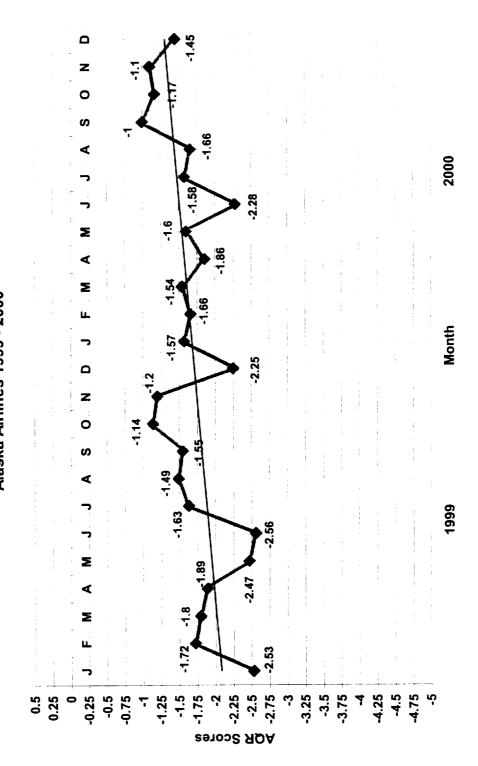
Airline Quality Rating
U.S. Airline Industry 1999 - 2000



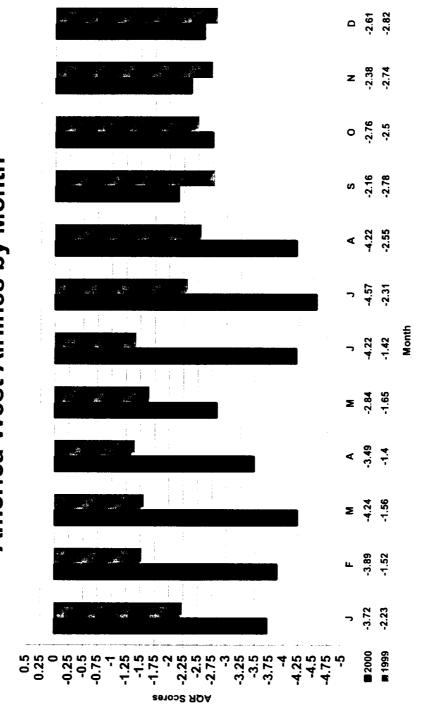
Airline Quality Rating Alaska Airlines by Month



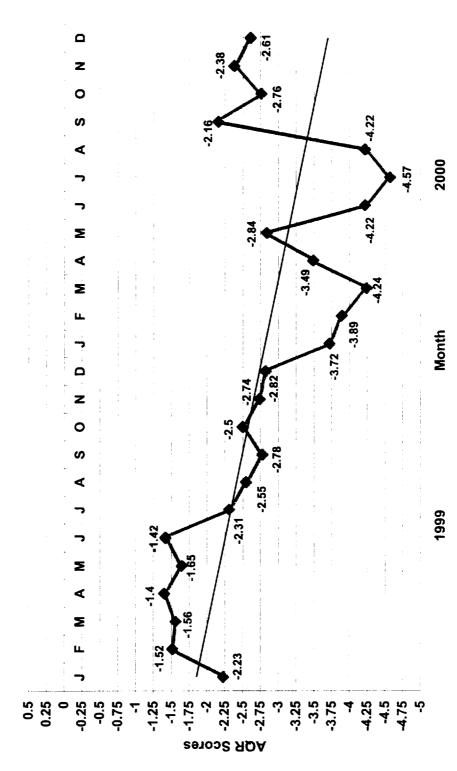
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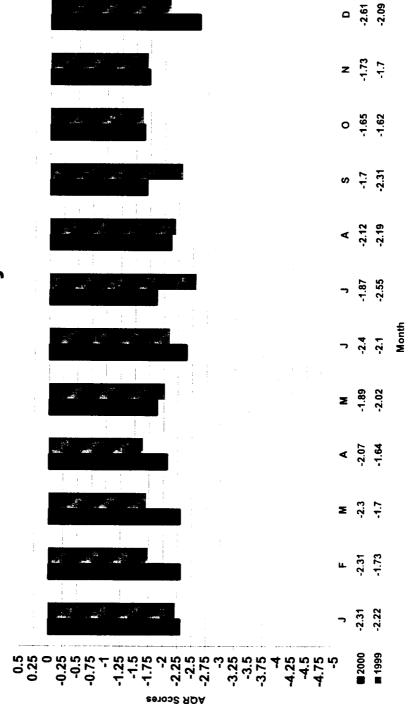




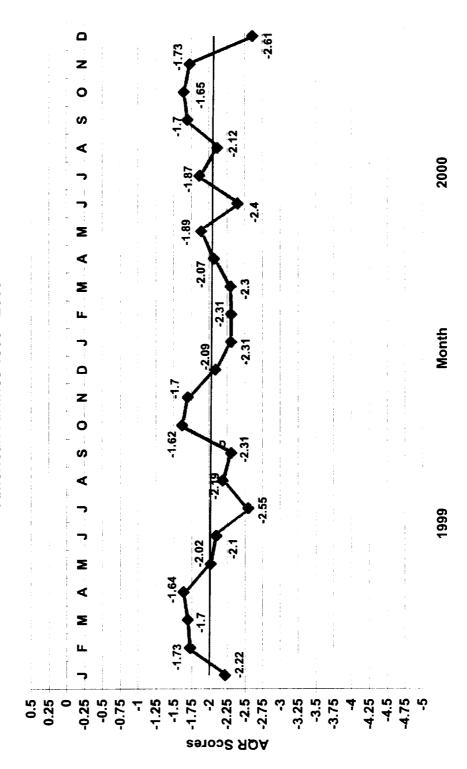
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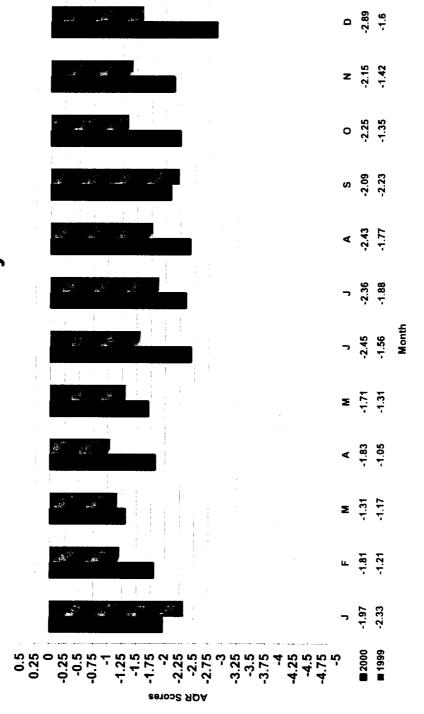
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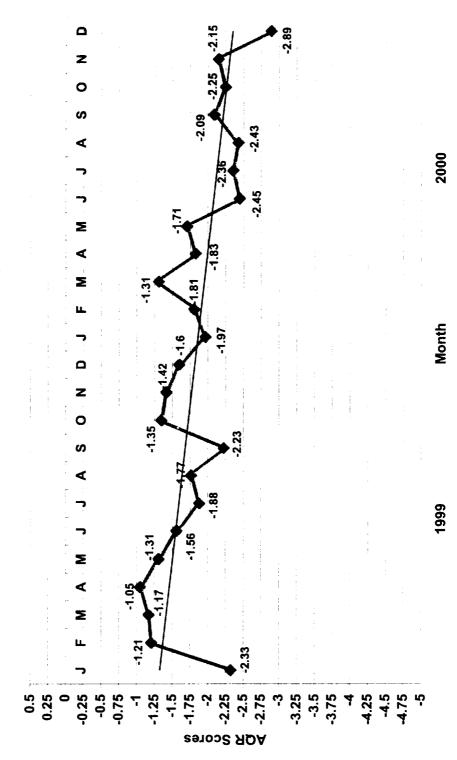
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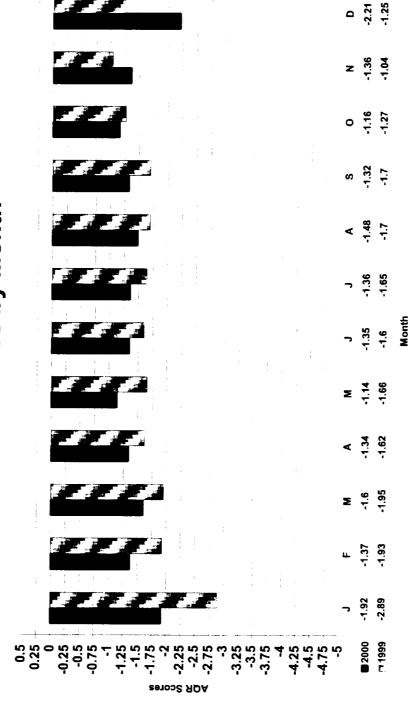
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Continental Airlines by Month



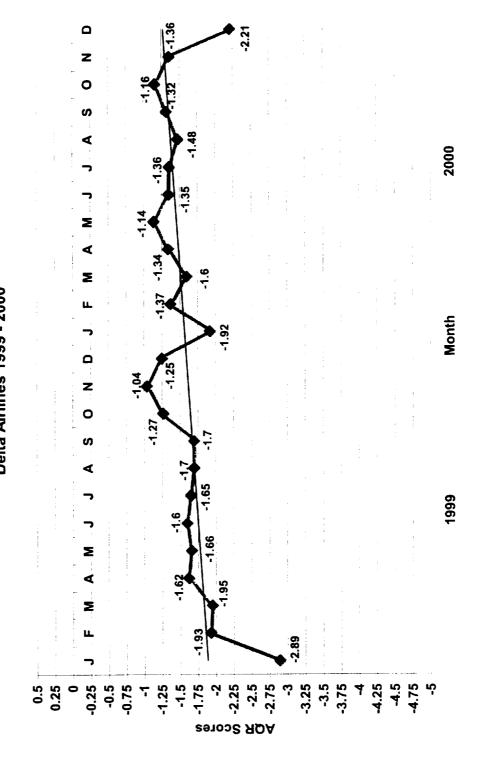
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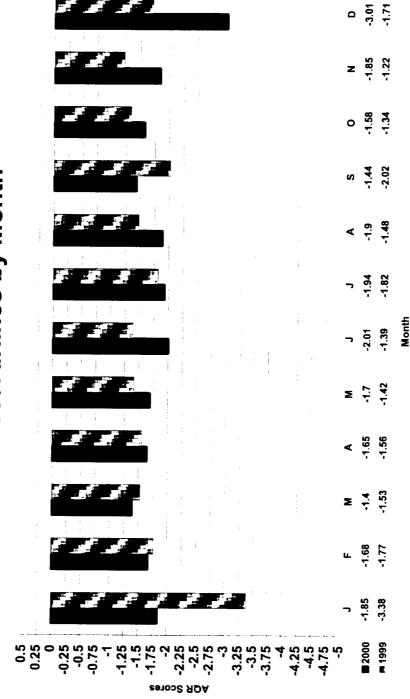
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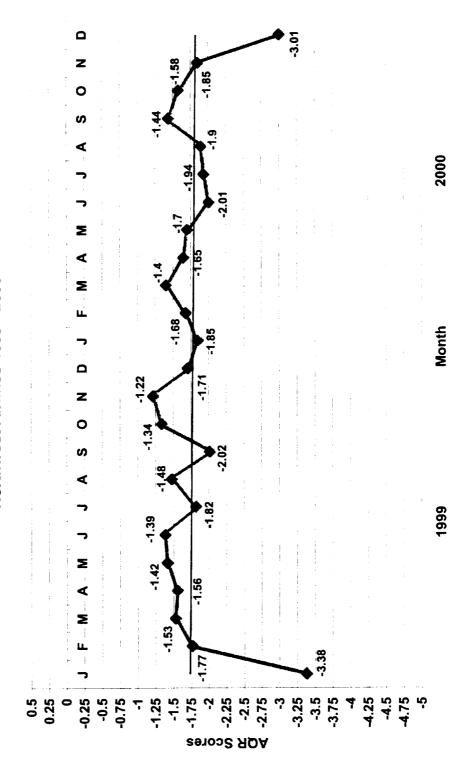
Airline Quality Rating
Delta Airlines 1999 - 2000



Airline Quality Rating Northwest Airlines by Month

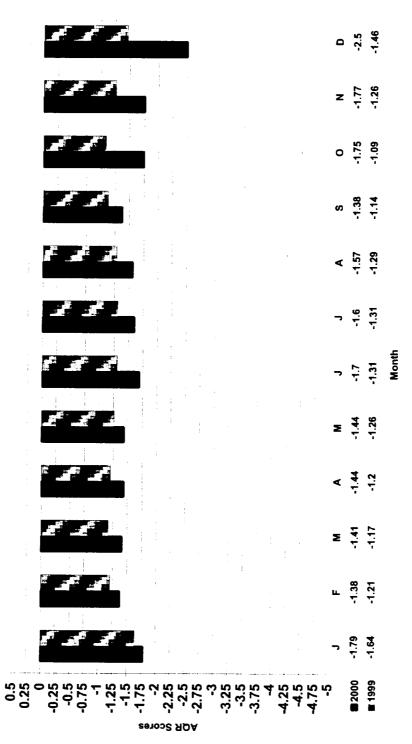


Airline Quality Rating
Northwest Airlines 1999 - 2000

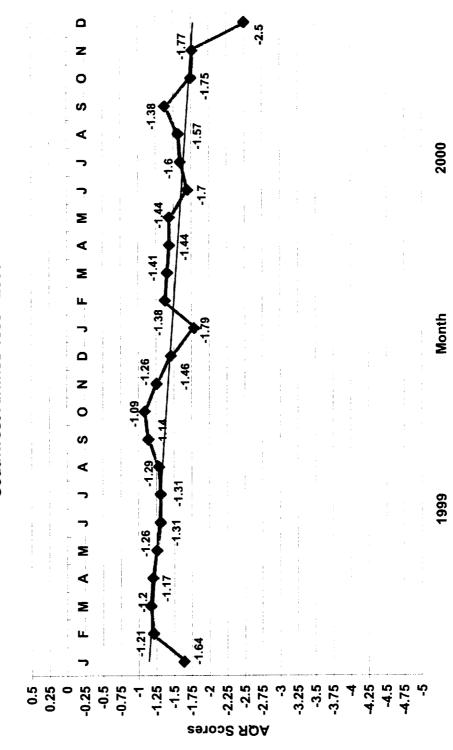


Airline Quality Rating

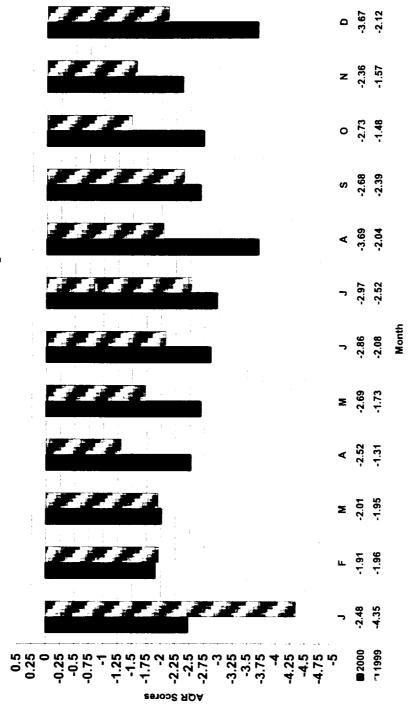
Southwest Airlines by Month



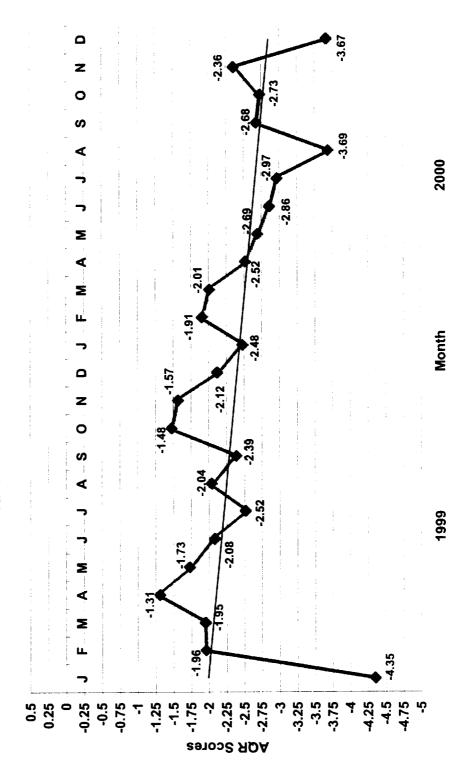
Airline Quality Rating Southwest Airlines 1999 - 2000



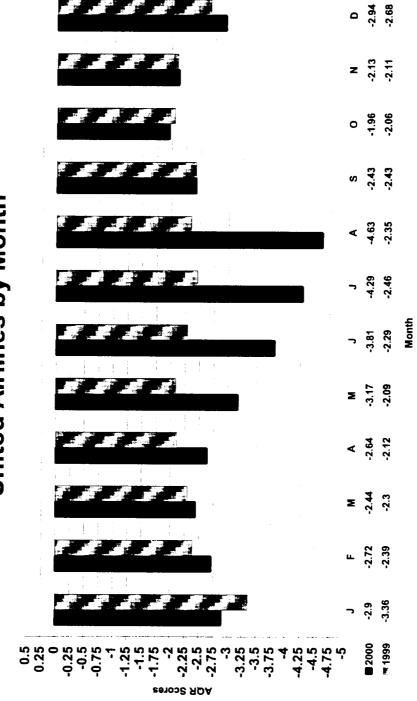
Airline Quality Rating
Trans World Airlines by Month



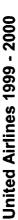
Airline Quality Rating
Trans World Airlines 1999 - 2000

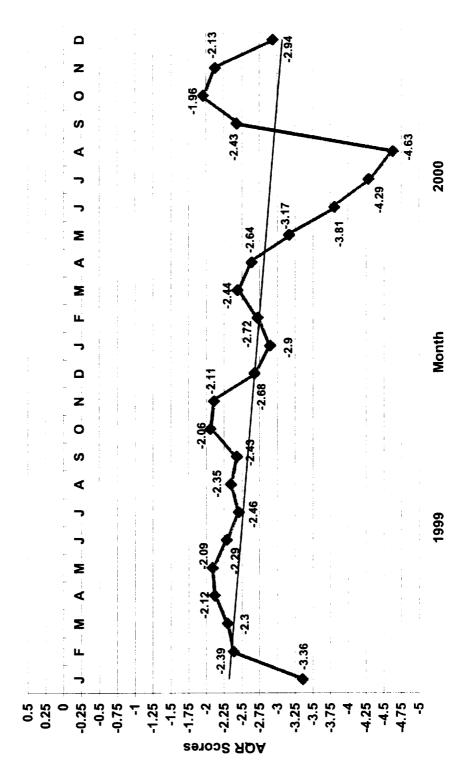


Airline Quality Rating

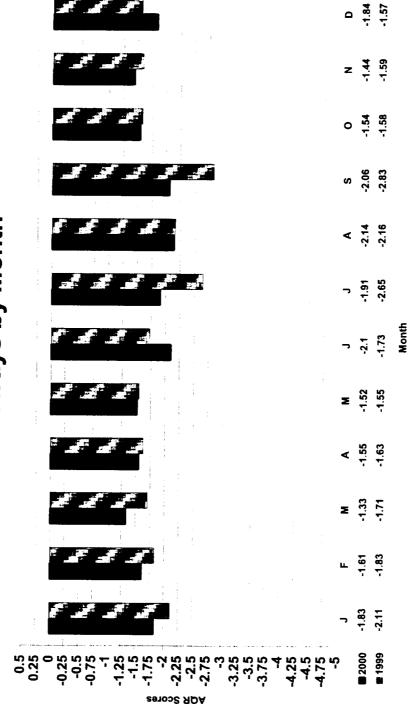


Airline Quality Rating
United Airlines 1999 - 2000

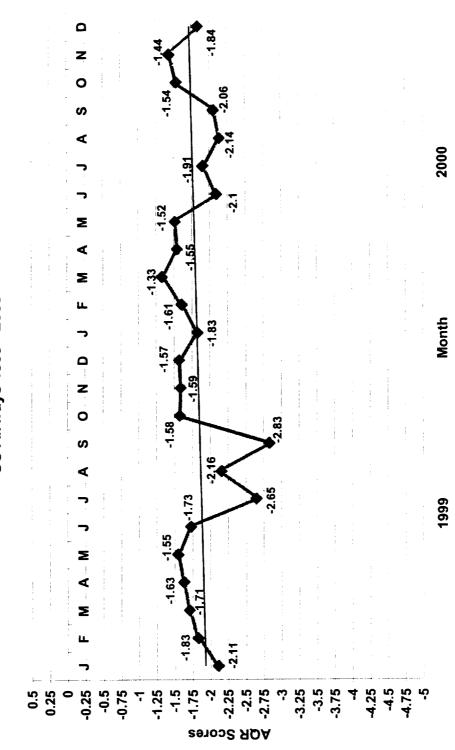




Airline Quality Rating



Airline Quality Rating
US Airways 1999 - 2000



APPENDIX

Detail of Frequently Cited Airline Performance Criteria

Consumer interest remains high regarding such issues as on-time performance, mishandled baggage, involuntary denied boardings (bumping), and treatment of customers. Since these criteria are central to the AQR calculations, it is important to provide more complete data for individual airlines in these areas. The following data tables and charts provide a detailed look at the performance of each of the ten major U.S. airlines for the 12 months of 2000 and 1999 regarding on-time arrivals, mishandled baggage, involuntary denied boardings, and consumer complaints. Data were drawn from the U.S. Department of Transportation monthly *Air Travel Consumer Report*.

We offer some observations in areas of concern to most consumers (on-time, mishandled bags, denied boardings, consumer complaints, and safety). This information can be useful in helping the less familiar consumer gain a perspective on issues of interest in the airline industry. Additional tables are included that give an overview of consumer complaints by type for 2000 and on-time arrival and departure information for the busiest airports.

The final pages of this appendix outline the Airline Quality Rating criteria definitions for reference and clarity in fully understanding the nature of the data reported.

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2000 On-Time Arrival Percentage by Month for U.S. Major Airlines

Airline

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Averag
Alaska	.705	.605	.682	.708	765	.655	.648	969.	797.	.705	.661	.570	.681
America West	.688	.627	.626	969	969	.605	.644	.595	.756	.605	.675	.646	.655
American	757	.751	.749	.750	.742	.655	.739	.739	.781	.756	.723	.608	.729
Continental	.758	.764	807	.798	.779	.731	.801	777.	.795	.822	800	.740	.781
Delta	.732	.793	.799	795	807	.737	.761	.773	.781	.821	.674	.561	.753
Northwest	.772	922.	.832	.812	.789	.750	.779	.792	.818	.835	745	.582	.774
Southwest					0	.711	.785	.762	.817	.710	.751	.653	.752
	.798	.824	.811	.810	.756	999.	.744	797.	855	777.	.815	.604	.769
United	705	.688	.731	.656	.566	.483	.417	.427	.718	969	.691	.613	.614
US Airways	.662	.757	.811	.723	.762	.633	.705	.673	.751	.785	.741	.671	.723
Monthly Avg737 Source: Air Travel Consumer Report, U.S.	. 737 эт <i>Report</i> , U	.748 . Depar	.770 Trant of Tra	.754 ansportati	.754 .743 insportation, Office	.663 of Aviation	.703 Enforceme	.700 . ent and Proc	.781 oceedings	.751	.728	.625	.726

2000 On-Time Arrival Ranking by Month for U.S. Major Airlines

						0							Airline
	Jan	Feb	Mar	Apr	May	Jun		Aug	••	Oct	No.	Dec	Ranking
Alaska	ω	9	6	ω	5	7		7		∞	10	6	∞
America West	6	တ	10	6	6	တ	6	တ	ω	10	ω	4	တ
American	5	9	9	9	∞	9		9		9	9	9	9
Continental	4	4	4	က	4	က		7		7	7	_	-
Delta	9	7	2	4	_	7		က		က	ნ	10	4
Northwest	က	က	_	~	7	_		_		₹-	4	ω	2
Southwest	2	7	7	5	က	4		5		7	က	က	5
Trans World	~	_	က	7	7	2		4		2	_	7	က
United	7	∞	ω	10	10	10		10		6	7	2	10
US Airways	10	2	7	7	9	ω		ω		4	2	7	7
Source: Air Travel Consumer Report, U.S. Depa	er Report, U	J.S. Depar	Iment of Ti	ransportati	on, Office	of Aviation	Enforcen	ent and P	roceeding	ø,			

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						1	•			•			
			;	,									Airline
	Jan	Feb	Mar	Apr	May	Jun	3	And	Sep	Ö	No.	Dec	Average
Alaska	.665	.709	.715	.726	.708	.742	.726	644	794	780	692	615	710
America West	.683	.780	.764	716	745	708	595	629	65.0 85.0	899	601	218	20 Y
American			28	697	652	647	707	787	775	9,00	500	01.7.	.090
Continental	720	830	803	707	746	000	023	107.		7 0	200.	0//	./ 35 202
0.140	7 4 6		9 6	7 10	- I	00.1	9/0.	00/	00/.	0	δ. 4	./81	99/
Deita	./14	808.	./93	/8/	767.	.723	.741	.780	808	.781	.837	.802	.780
Northwest	.627	.824	.810	908.	.823	.751	.738	.813	.856	.852	.881	.815	799
Southwest	.767	.828	.811	.781	797.	.769	.784	.817	.853	.834	789	.770	800
Trans World	909	.832	.846	.803	.824	.682	.765	.849	.894	895	897	824	809
United	.665	.786	.788	.711	737	689	.695	.718	.760	795	812	279	744
US Airways	.582	.745	.730	.743	.761	.681	.612	069	.715	.749	.782	777.	.714
Monthly Avg.	.677	.789	.781	757.	.762	.709	.711	.761 .793	.793	801	814	780	761
Source: Air Travel Consumer Report, U.S. Depa	Report, U	S. Departi	ment of Tra	ansportatic	n. Office c		Foforcem	ant and Dr	condings) :	-

1999 On-Time Arrival Ranking by Month for U.S. Major Airlines

)							
	•		1										Airline
	Jan	Feb	Mar			Jun	اع اعر	Aug	Sep	o O	No No	Dec	Ranking
Alaska	9	10	10			က	75	σ	. rc	α	σ	10	σ
America West	4	7	7			22	9 0	, 6	5	, C	۰ ۲	2 σ	, C
American	2	6	6			10	2 ပ	4	2 ~	5 4	5 4	o (c	2 ~
Continental	7	2	4			^	, α	. დ	ى .	יני	רער	9 4	- ע
Delta	က	5	2			4	က	י ער	4	^	o cr	r (*) 4
Northwest	8	4	က			. 2	4	ന	^	۰ ۸	۰ ۸) C	ተ ‹‹
Southwest	_	က	7			· -	· -	^	1 m	1 m	7	1 α	o 0
Trans World	6	_	-			∞	~ ~	· -	-	· -	•	· -	1 ←
United	7	9	9	6	ω	9			- ω	-	- 9	- ແ	- დ
US Airways	10	∞	œ			6	6	· 00	<u></u>	o 0:	α	^	ο α
Source: Air Travel Consumer Report 11.S. Dens	Per Report	7	ment of Tr		Ş	. A		1) :))	•	•

On-Time Performance for Selected* U.S. Airports January - June 2000

	JAN % On- Arr.	Time Dep.	FEB % On- Arr.	Time Dep.	MAR % On- Arr.	Time Dep.	APR % On- Arr.	Time Dep.	MAY % On- Arr.	Time Dep.	JUN % On- Arr.	Time Dep.
ATL	72.6	74.9	79.2	81.3	78.5	81.7	77.1	80.0	80.2	82.1	75.7	75.2
BWI	70.4	70.0	76.6	79.0	77.7	81.0	77.4	79.9	73.9	76.7	68.0	69.3
BOS	61.4	69.3	71.0	77.8	72.3	81.0	64.7	76.4	68.6	76.7	55.1	66.3
CLT	68.0	68.8	81.3	81.4	84.9	85.5	78.5	78.7	81.5	80.5	70.7	69.8
ORD	65.9	71.0	69.8	73.6	74.3	78.0	65.4	70.9	62.6	66.7	54.4	58.0
CVG	76.7	80.4	82.7	83.7	83.2	87.7	84.3	87.1	81.9	84.7	77.2	78.0
DFW	82.8	82.3	81.3	80.7	76.7	76.0	79.9	79.4	77.7	76.7	67.7	67.3
DEN	79.6	84.1	78.2	81.5	76.6	79.4	72.7	78.1	65.1	68.7	54.2	60.1
DTW	80.3	79.0	81.9	80.4	84.5	82.0	81.9	80.1	78.4	77.0	75.4	72.5
IAH	81.6	85.0	76.4	81.4	80.4	84.7	83.0	86.1	78.5	81.4	76.2	79.4
MCI	78.5	84.3	79.4	82.6	80.5	84.4	77.8	83.8	74.7	79.7	67.4	73.9
LAS	72.3	74.5	67.1	68.5	70.5	69.3	73.6	73.7	73.0	73.0	65.2	64.9
LAX	69.7	76.9	61.4	69.6	71.3	75.9	69.8	74.7	69.7	74.5	62.4	68.0
MIA	78.4	79.9	80.6	83.3	77.8	83.2	74.5	80.9	78.7	82.0	67.3	75.4
MSP	77.4	79.3	76.9	79.1	85.4	84.5	83.1	84.7	81.1	82.2	76.7	77.0
LGA	60.3	69.8	71.6	80.5	71.4	83.2	65.6	75.5	65.1	76.1	54.8	67.0
EWR	65.4	72.6	71.6	79.2	71.1	80.9	66.8	75.5	66.4	75.4	57.8	68.3
MCO	76.6	81.9	79.3	84.5	79.3	84.9	75.4	81.3	78.0	81.9	66.9	73.6
PHL	63.9	67.3	72.4	76.8	73.7	78.7	68.0	72.8	67.1	73.1	54.7	58.2
PHX	75.5	75.7	70.2	69.6	67.7	67.7	75.9	74.9	77.5	74.5	66.9	65.6
PIT	74.2	77.6	78.4	80.8	84.2	85.6	77.3	80.6	78.4	80.5	68.3	69.9
SLC	76.9	83.9	77.9	82.7	81.5	83.4	82.8	87.1	81.2	84.7	74.0	77.3
SAN	74.2	80.6	66.5	72.9	74.3	77.1	74.6	77.3	74.4	78.2	65.6	72.1
SFO	58.1	71.6	51.7	63.7	71.4	77.4	65.4	74.2	58.4	68.0	56.6	66.4
SJC	72.8	81.0	67.0	71.8	74.1	76.7	74.9	79.2	74.3	78.8	68.7	74.8
SEA	69.9	79.6	69.4	74.7	71.9	77.2	71.8	78.8	66.7	76.8	58.6	67.1
STL	80.5	80.9	81.9	82.2	80.7	79.8	81.1	80.9	77.5	76.6	70.6	68.5
TPA	75.1	82.4	78.0	82.6	78.5	84.8	75.2	82.5	78.4	83.7	66.4	75.2
DCA	71.0	76.3	78.6	84.1	82.8	88.6	80.1	85.1	77.8	83.9	68.9	75.3
IAD	70.7	73.9	78.7	83.2	77.8	84.4	71.8	77.1	68.3	74.0	57.7	63.8

^{*}Selected based on average number of reported operations exceeding 5000 per month.

ATL Atlanta
BWI Baltimore
BOS Boston
CLT Charlotte
ORD Chicago
CVG Cincinnati

DFW Dallas **DEN** Denver DTW Detroit LAS Las Vegas

LAX Los Angeles PHL Philadelphia SJC San Jose MIA Miami MSP Minn./St.Paul PIT Pittsburgh

PHX Phoenix

SEA Seattle STL St. Louis IAH Houston LGA LaGuardia SLC Salt Lake City TPA Tampa
MCI Kansas City EWR Newark SAN San Diego DCA Regan Nat'l
LAS Las Vegas MCO Orlando SFO San Francisco IAD Washington, Dulles

On-Time Performance for Selected* U.S. Airports July - December 2000

	JUL % On Arr.	-Time Dep.	AUG % On Arr.	-Time Dep.	SEP % Or Arr.	ı- Time Dep.	OCT % On Arr.	ı- Time Dep.	NOV % On Arr.	ı- Time Dep.	DEC % On Arr.	- Time Dep.
ATL	74.0	74.7	76.7	77.5	73.0	76.7	85.1	85.9	69.6	72.4	56.9	55.9
BWI	72.3	74.3	69.6	73.1	81.5	82.9	80.7	81.4	80.6	81.4	69.8	68.9
BOS	60.5	70.0	57.4	69.2	72.4	82.8	68.8	79.9	69.9	78.8	65.0	68.6
CLT	76.6	76.5	74.9	74.9	80.9	82.8	87.2	87.1	78.3	77.8	70.1	68.3
ORD	49.8	55.0	50.6	56.6	74.0	76.2	76.3	79.6	68.4	70.4	48.0	46.7
CVG	79.3	81.8	79.1	81.6	83.7	85.4	85.2	86.0	78.7	81.5	64.5	65.4
DFW	81.5	79.9	83.2	81.7	84.6	84.5	80.9	83.7	72.8	76.5	67.1	67.9
DEN	52.4	54.1	53.2	56.1	78.4	79.5	76.1	77.8	71.9	71.9	64.1	65.8
DTW	77.7	75.4	78.9	76.9	83.0	80.2	85.4	83.5	80.3	75.9	59.9	57.0
IAH	81.9	83.1	79.9	83.0	80.7	84.1	83.1	86.0	75.7	81.9	73.7	79.4
MCI	71.2	77.2	71.9	78.6	81.0	86.7	77.9	82.3	77.0	82.7	59.7	63.4
LAS	71.8	69.7	69.5	67.9	79.4	79.2	68.2	68.2	70.2	72.6	64.6	65.9
LAX	66.7	70.6	66.6	69.7	73.5	78.9	59.1	67.7	67.0	72.5	61.4	67.9
MIA	68.5	73.7	67.4	73.0	75.2	80.8	78.4	81.2	76.8	80.9	63.1	71.9
MSP	79.9	78.8	80.8	81.0	85.0	84.3	86.3	84.6	77.0	77.2	63.5	60.4
LGA	65.3	75.6	53.6	69.0	43.0	66.5	48.3	71.0	44.9	64.7	46.6	57.0
EWR	68.6	74.2	63.8	70.4	75.0	81.6	76.5	83.9	81.2	84.6	67.0	70.7
MCO	68.9	76.3	70.8	78.7	78.6	84.5	81.5	86.0	73.4	79.6	60.5	69.4
PHL	61.0	65.9	56.5	63.4	71.2	76.9	73.8	78.6	75.2	78.5	64.1	65.9
PHX	73.1	69.0	69.2	67.2	81.3	79.8	63.1	64.0	68.6	70.8	66.6	67.9
PIT	72.3	74.7	70.5	73.4	79.6	82.9	82.8	84.7	80.5	80.8	70.7	70.4
SLC	77.8	79.9	78.7	80.6	82.3	86.6	78.4	82.5	70.5	78.2	60.3	65.0
SAN	71.1	73.6	72.1	74.3	79.5	83.6	67.9	72.9	67.1	72.6	62.2	68.0
SFO	49.9	62.9	58.5	68.2	70.6	79.0	58.1	67.5	66.1	70.8	65.5	71.3
SJC	72.4	76.8	72.8	75.3	78.7	81.6	67.8	71.0	69.2	73.4	65.1	69.1
SEA	65.6	70.6	68.9	72.8	75.3	80.9	70.1	76.6	68.3	74.0	56.5	64.1
STL	76.4	74.4	77.4	77.2	85.2	85.3	78.3	78.2	81.4	81.8	60.2	59.7
TPA	68.2	76.6	69.9	76.8	77.3	82.9	81.2	86.5	73.3	80.9	60.1	71.2
DCA	74.9	80.3	70.0	79.1	80.2	89.0	83.1	89.4	77.7	86.0	69.1	76.6
IAD	59.2	65.2	54.9	62.2	76.5	77.5	78.4	81.0	73.8	76.9	68.5	71.8

^{*}Selected based on average number of reported operations exceeding 5000 per month.

ATL Atlanta
BWI Baltimore
BOS Boston
CLT Charlotte
ORD Chicago
CVG Cincinnati

DFW Dallas **DEN** Denver **DTW** Detroit LAS Las Vegas

MIA Miami MSP Minn./St.Paul PIT Pittsburgh MCO Orlando

LAX Los Angeles PHL Philadelphia SJC San Jose PHX Phoenix SEA Seattle STL St. Louis IAH Houston LGA LaGuardia SLC Salt Lake City TPA Tampa MCI Kansas City EWR Newark SAN San Diego DCA Regan SAN San Diego DCA Regan Nat'l SFO San Francisco IAD Washington, Dulles

2000 Involuntary Denied Boardings by Quarter for U.S. Major Airlines (per 10,000 passengers)

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	2000 Average
Alaska	1.47	1.83	1.32	1.03	1.41
America West	1.79	1.36	0.71	0.68	1.12
American	0.59	0.43	0.31	0.35	0.42
Continental	0.50	1.52	1.87	2.91	1.80
Delta	0.44	0.35	0.25	0.27	0.33
Northwest	0.12	0.72	0.42	1.00	0.57
Southwest	1.70	2.10	1.71	2.04	1.89
Trans World	0.73	3.20	4.03	1.83	2.54
United	1.61	1.99	1.30	0.77	1.43
US Airways	0.80	0.86	0.37	0.66	0.65
Industry Average	0.90	1.22	0.98	1.01	1.04

Source: Air Travel Consumer Report, U.S. Department of Transportation, Office of Aviation Enforcement and Proceedings.

1999 Involuntary Denied Boardings by Quarter for U.S. Major Airlines (per 10,000 passengers)

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	1999 Average
Alaska	0.76	1.27	0.92	0.67	0.91
America West	1.53	1.13	1.48	1.44	1.39
American	0.51	0.39	0.37	0.45	0.43
Continental	0.31	0.26	0.28	0.50	0.34
Delta	3.33	2.07	0.61	0.15	1.53
Northwest	0.39	0.13	0.12	0.12	0.18
Southwest	1.33	1.48	1.39	1.30	1.38
Trans World	2.56	0.27	0.10	0.25	0.73
United	1.17*	0.41*	0.55*	1.54*	0.90*
US Airways	0.94	0.53	0.26	0.39	0.52
Industry Average	1.44	0.89	0.57	0.67	0.88

^{*} Figures may reflect an inaccurate rate of passengers involuntarily denied boardings as reported to DOT by United Airlines.

2000 Mishandled Baggage by Month for U.S. Major Airlines (per 1,000 passengers)

													Airline
	Jan	Feb	Mar	Apr	Mav	Jun	lul.	Alla	Coc	Ç	Š	Š	Visit in the
Alseks	2 70	7.1	0	1			;	2	2	3		ב	Average
Alaska	0.70	3.70 3.57	3.32	7.7	3.15	6.42	4.25	3.70	2.63	2.30	3.02	4.75	3.48
America West		ထ်	7.65	5.81	5.78	7 93	8 50	8 16	166	70	7 7	0 7 0	
Amorican	4	4				. 1) i	<u>.</u>) •	5	0.00	0.40	20.0
	5.23	5.25 5.18	5.63	20.0	5.44	5.97	5.47	5.16	4.37	4.59	5.20	8.76	5.50
Continental	4.27	4.27 4.35	3.49	3.97	4.11	6.21	5.70	5.64	4 72	4 73	5.07	7 53	
Delta	5.65	5.65 4.08	5.04	3.81	3.64	4 00	38	3 06		200	5 5	5.7	0.00
N				5	5	2	5.5	0.00	4.00 0.1	9.07	4.07	/.b1	4.49
Northwest	5.23 4.81	4.81	4.26	4.24	4.98	5.62	5.57	5.08	4.33	4 12	4 96	10.00	2.04
Southwest	5 62	7 73	7	2	7 7	Ĺ) (! :		2.5	77.0
100111111111111111111111111111111111111	20.0	2	4.40	4 .0	1 .	ე. ე.	ე. ე.	4.94	4.35	5.44	5.54	8.41	5.00
I rans World	60.9	6.09 4.74	5.24	4.52	5.23	6.10	6.16	7 15	5 27	9	5.61	10.03	90.9
Lotto	7 11	711 670	1	1	1	1) (9	5	0.00	0.00
	- - -	7/0	0.0	2.¤/	٥./١	09.	7.89	7.18	4.65	4.53	5.11	8.71	6.57
US AILWays												<u>-</u>	4.76
)
Monthly Avg.	5.56 4.81	4.81	66.7	4 49	4 80	5 72	7		A KK		90 7	. 0	C
Source: Air Travel Consumer Report, U.S. Department of Transportation, Office of Aviation	ar Report, U	S. Depart	ment of Tr	ansportatic	on, Office	O. 1. Z. of Aviation	Enforcemen		1.30 4.33		4.30	0.07	5.29

2000 Mishandled Baggage Rankings by Month for U.S. Major Airlines

	Í	4000 WIIS			gage	Kankli	KINGS DY	by Month		tor U.S. Major Airlines	or Airli	nes	
	-	L		•	1								Airline
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Alaska	_	τ-	τ-		τ-	∞		τ-		~	•	τ-	
America West	о	თ	10	6	တ	10	10	10		· Ç	- σ	- cr	- \$
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Continental	2	2	7	က	က	_	^	^	α) /	- ע	> <	- 0
Delta	7	7	9	7	2 (. —	۰ ۸	۰ ،	0 0	۰ ،) c	1- ւ	o c
Northwest	5	7	2	22	ı G	. 4	ועכ	ו ע	1 c	۱ ۳	٧ <	o c	7 1
Southwest	9	က	4	4	4	- ~	4	o «) 4	οα	1 α	n u	ი <
Trans World	œ	9	7	7		9	- α	α	rσ	σ	5 0	o 5	4 0
United	10	10	6	10	10	တ	o 0:	σ) (C	י ער	2 c	2 ~	0 0
US Airways	က	4	က	9	2	က	က	4	2	4	۰ ۸	- 0	יי מ
Source: Air Travel Consumer Report, U.S. Departme	r Report, U.	S. Depart	ment of Tr	ansportatic	n, Office c	Ă	Enforcem	ent and Pro	ceedings	•	1	1	ס

1999 Mishandled Baggage by Month for U.S. Major Airlines (Per 1,000 passengers)

													Airline
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average
Alaska	8.87	6.23	6.34	99.9	7.24	7.89	5.19	4.18	2.97	3.55	3.74	98.9	5.75
America West	5.21	3.52	4.05	3.97	3.41	4.30	5.38	5.12	3.93	4.38	4.57	6.31	4.52
American	!)	1)									5.86	5.21
Continental	8.49	4.28	4.11	3.55	3.69	5.20	5.15	4.25	3.31	3.47	3.04	4.78	4.42
Delta	7.63	4.25	4.29	3.97	3.79	3.87	4.99	4.67	3.81	4.35	3.11	4.21	4.39
Northwest	10.30	10.30 5.04	5.36	4.54	3.54	4.48	4.97	4.11	3.39	3.70	3.65	5.82	4.81
Southwest	5.70	5.70 4.20	4.08	4.02	3.95	4.32	4.32	4.12	3.33	3.70	4.13	5.10	4.22
Trans World	11.99	4.48	4.67	4.35	4.39	6.18	6.54	4.79	3.85	4.03	3.97	6.57	5.38
United	11 27	11 27 7 71	7.72	7.08	6.35	7.54	7.09	6.50	5.11	5.26	5.33	7.89	7.01
US Airways	5.37	5.37 5.29	5.12	4.49	4.72	5.24	7.72	5.27	4.37	4.32	4.13	4.86	5.08
Monthly Avg. 8.08 5.05 5.12 4.70 4.53 5.29	8.08	5.05	5.12	4.70	4.53	5.29	5.75	5.75 4.94 3.99	3.99	4.25	4.01	5.63	5.08
Source: Air Travel Consum	er Report. U	S. Depar	tment of Ti	ransportati	on, Office	of Aviatior	ı Enforcerr	ent and Pi	oceedings	•			

1999 Mishandled Baggage Kankings by Month for U.S. Major Alfillies	
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							,			•			Airline
	Jan	Jan Feb	Mar	Apr		Jun	Jul	Aug	Sep	_	No No	Dec	Ranking
Alaska	7	6	6	<u>_</u> 6		10	5) რ	· 		4	6	o
America West	. —	· -	-	7		7	9	7	7		တ	7	4
American	. 4	. ပ	ၑ	ω		7	7	∞	∞		∞	9	7
Continental	ေဖ	4	က	_		5	4	4	7		_	7	က
Delta	יני	· (r)	4	က		-	က	2	2		2	-	2
Northwest	, α	^	- ∞	^		4	7	-	4		က	2	5
Southwest) (r)	. ~	~	4		က	_	2	က		7	4	_
Trans World	, 6	ויג	יאו	. 73		ω	ω	9	9		2	ω	&
United	<u>)</u> თ	9 0	10	10	<u>ဂ</u>	6	တ	10	10	10	10	10	10
US Airways	2	· œ	7	9		9	10	6	6		9	က	9
Source: Air Travel Consumer Report, U.S. Depa	er Report, L	J.S. Depar	tment of T	ransportatik	≂	of Aviation	Enforcen	Enforcement and P	roceedings	.			

2000 Total Complaints to Department of Transportation by Month for U.S. Major Airlines (per 100,000 passengers)

													Airline
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	NoV	Dec	Average
Alaska	2.00	2.47	2.33	4.00	2.48	1.75	1.62	2.63	0.97	2.34	1.19	69.0	2.04
America West	3.38	9.74	9.07	8.37	5.51	9.15	10.75	9.59	4.51	5.50	4.44	4.42	7.51
American	4.70	4.74	4.22	4.06	2.77	4.33	2.76	4.24	3.29	2.76	2.38	2.18	3.54
Continental	4.37	3.59	2.37	2.99	2.25	3.16	3.04	3.38	2.89	2.49	1.62	2.13	2.84
Delta	2.64	2.00	1.99	2.30	1.60	2.07	1.80	2.83	2.02	1.78	1.41	1.74	2.01
Northwest	3.23	2.94	2.36	2.78	2.17	2.78	2.92	3.30	2.10	2.35	2.49	1.85	2.61
Southwest	0.77	0.56	0.58	0.51	0.41	0.48	0.53	0.49	0.38	0.30	0.35	0.27	0.47
Trans World	4.38	3.38	3.29	3.55	3.47	3.14	2.73	4.85	2.57	4.34	3.20	2.86	3.47
United	4.02	3.64	2.71	3.75	5.07	6.84	9.34	11.61	5.03	3.66	3.74	3.27	5.30
US Airways	3.05	2.37	1.65	2.01	1.63	3.00	3.40	4.34	3.16	2.55	1.95	1.85	2.59
Monthly Avg. 3.46 3.08 Source: Air Travel Consumer Report, U.S. Dep.	3.46 er Report, U	3.46 3.08 Report, U.S. Depart	2.61 tment of Tra	2.93 ansportati	2.49 on, Office o	3.47 of Aviation	3 2.61 2.93 2.49 3.47 3.62 4.56 2.72 partment of Transportation, Office of Aviation Enforcement and Proceedings	4.56 ent and Pr	2.72 oceedings	2.46	2.11	2.01	2.98

2000 Total Complaints to Department of Transportation by Month for U.S. Major Airlines Rankings Airline

	Jan	Feb	Mar	Apr	May	Jun	Ju	Aug	Sep	oct O	No No	Dec	Ranking
Alaska	7	4	4	∞	9	7	7	7	7	က	7	7) დ
America West	10	10	9	10	10	10	10	တ	6	10	10	10	10
American	6	တ	တ	6	7	∞	2	9	∞	7	9	7	. œ
Continental	7	7	9	2	5	7	7	2	9	2	4	9	9
Delta	က	7	က	က	7	က	က	က	က	2	က	က	2 (
Northwest	2	2	2	4	4	4	9	4	4	4	^	יני	ויג
Southwest	~	~	τ-	-	-	-	_	_	· -	τ.	,	· -	· -
Trans World	80	9	∞	9	ω	9	4	- ∞	· rv	· თ	- α	· œ	
United 6 8	9	ω	7	7	6	6	တ	10	10	ω	တ	ာတ	. ග
US Airways	7	က	7	7	က	2	∞	7	7	9	. rc	4	4
Source. Air Travel Congue	II monday	0	T be dear	11-11-11-11	370				. :	,)	•	•

1999 Total Complaints to Department of Transportation by Month for U.S. Major Airlines (Per 100,000 passengers)

								()					Airline
	Jan	Feb	Mar	Apr	May	Jun	Ju	Aug	Sep	oct O	Nov	Dec	Average
Alaska	1.34	0.74	96.0	0.45	2.38	2.10	1.33	1.74	3.53	1.32	1.27	2.38	1.64
America West	3.21	2.07	1.66	1.41	3.18	1.14	3.35	4.72	7.11	5.41	6.29	4.76	3.73
American	2.21	2.81	2.21	2.41	3.70	3.21	5.26	4.56	00.9	2.81	3.26	3.23	3.50
Continental	1.46	1.30	1.27	1.39	2.35	1.69	3.12	3.76	6.87	2.57	3.35	2.20	2.62
Delta	1.52	1.10	1.11	1.40	1.82	1.36	2.02	2.62	3.61	1.59	2.03	1.68	1.82
Northwest	3.89	2.81	1.51	2.71	3.21	1.97	3.33	2.85	6.10	2.73	2.31	2.01	2.93
Southwest	0.40	0.24	0.18	0.15	0.50	0.29	0.42	0.59	0.84	0.30	0.51	0.30	0.40
Trans World	3.88	1.87	1.61	1.67	3.49	2.92	4.76	4.63	7.31	2.91	3.37	2.85	3.45
United	1.92	1.69	1.28	1.98	2.65	2.20	3.29	3.48	5.41	2.56	2.71	2.37	2.66
US Airways	3.06	2.12	1.74	2.58	2.74	2.11	3.64	4.29	8.29	2.70	2.98	2.06	3.15
Monthly Avg. 2.07 1.67 1.35 1.73 2.47 1.89 3.06 3.23 5.18	2.07	1.67	1.35	1.73	2.47	1.89	3.06	3.23	5.18	2.27	2.56	2.14	2.48
Source: Air Travel Consun	er Report, L	J.S. Depart	tment of Tr	ansportati	on, Office	of Aviation	Enforcen	ent and P	roceedings				

1999 Total Complaints to Department of Transportation Rankings by Month for U.S. Major Airlines

	Jan	Feb	Mar	Apr		Jun			Sep	Oct	No.	Dec	Ranking
Alaska	7	7	7	7		9			7	7	7	7	2
America West	∞	7	ω	2		7			ω	10	10	10	10
American	9	6	10	ω		10			2	ω	7	6	တ
Continental	က	4	4	က		4			7	S	ω	2	4
Delta	4	က	က	4		က			က	က	က	7	က
Northwest	10	9	9	10	ω	2	9	4	9	7	4	က	9
Southwest	_	~	_	_		_			_	-	_	-	-
Trans World	6	9	7	9		6			တ	6	တ	ω	ω
United	2	5	2	7		∞			4	4	5	ၑ	2
US Airways	7	∞	6	6		7			10	9	9	4	7
Source: Air Travel Consumer Report, U.S. Depart	er Report, U	J.S. Depar	tment of Tr	ansportati	on, Office (of Aviatior	ш	ent and P	roceedings				

Overview of Complaints Received by Department of Transportation 2000 and 1999

							o D	lop Four C	Categories**	les**
	Comp	Somplaints	Complaints	aints	Complaints	aints	of C	omplai	of Complaints to Al	H
	For Al	Airlines*	for U.S	. Airlines	for 10	Major Airlines	U.S.	Airline	J.S. Airlines, 2000	_
	2000	1999	2000	1999	2000	1999	_	7	က	4
Jan	2029	1175	1773	1028	1394	829	Н	SS	BG	TB
Feb	1999	1018	1693	849	1292	651	FP	SS	BG	TB
Mar	1929	1929 1154	1658	1658 969	1325	647	FР	SS	BG	<u>1</u> B
Apr	2084	1314	1800	1122	1421	804	G	SS	BG	<u>T</u> B
May	1693	1704	1495	1436	1239	1151	FP.	SS	BG	TB
Jun	2389	1332	2141	1142	1807	925	ቸ	SS	BG	18
Jul	2444	2485	2242	2111	1931	1584	Ą.	SS	BG	TB
Aug	2911	2347	2659	1983	2380	1634	FP	SS	BG	1B
Sep	1588	3161	1410	2732	1211	2265	FР	CS	BG	18
Oct	1604	1616	1395	1325	1186	1086	G	SS	BG	TB
Nov	1392	1700	1190	1385	286	1179	d.	CS	BG	E H
Dec	1285	1477	1077	1231	897	952	Ę.	CS	BG	TB
	23381	20495	20564	17381	17072	13709	g.	S	BG	18

^{*} Total number includes complaints for all U.S. airlines + foreign airlines + cargo companies + travel agents + tour operators + miscellaneous sources. Percent (%) of All Complaints for U.S. Carriers in these Categories for 2000 42.5 19.9 13.5

^{**} FP = Flight Problems; CS = Customer Service; BG = Baggage; TB = Reservations, Ticketing, and Boarding. Details of categories and definitions are listed in the appendix.

Some Interesting Facts About U.S. Airlines

Approximately 517 million people boarded one of the ten major U.S. carriers to fly somewhere inside the U.S. in 2000. This does not consider the almost 56 million people that boarded a flight in the U.S. and went to an international destination. Regional and commuter carriers accounted for an additional approximately 85 million passengers flying domestic routes as well. This totals to approximately 658 million people boarding planes in the U.S. in 2000. Looking to the future, the Federal Aviation Administration forecasts that domestic passenger enplanements will increase, on average, between 3% and 4% each year. That would mean domestic enplanements could reach 1 billion passengers within the next ten years.

Your chance of having a bag mishandled or lost depends on how you use the baggage system, but about one out of every 200 checked bags are reported mishandled. Most bags are returned to the traveler within 48 hours. Only a very few are completely lost and never returned.

The ten major U.S. airlines averaged 5.29 mishandled bags per 1,000 passengers, an increase over the 1999 mishandled baggage rate of 5.08.
Worst months for baggage handling were December (8.07) and June (5.72).
Fewest bags were reported mishandled in April (4.49), October (4.51), and September (4.55).
Airline that mishandled bags most often was America West (6.62).
Airline that mishandled bags least often was Alaska Airlines (3.48).

On-Time Arrival:

On-time arrivals are affected by many uncontrollable factors. When just the more controllable elements are considered, the ten major U.S. carriers maintained a 72.6% ontime arrival record for 2000. This was worse than the 76.1% on-time arrival record for the industry in 1999.

- Worst on-time arrival performer for 2000: United (61.4%). (\mathbf{r})
- Best on-time arrival performer for 2000: Continental (78.1%).
- The most troublesome months to fly in 2000 (lowest on-time arrival performance for the industry) were December (62.5%) and June (66.3%).
- The most successful on-time arrival months for the industry in 2000 were September (78.1%), March (77.0%), and April (75.4%).

Being Bumped From a Flight (Involuntary Denied Boardings):

Across the industry, 1.04 passengers per 10,000 boardings were bumped from their flight involuntarily in 2000. This is an 18% increase over the industry rate of 0.88 denied boardings per 10,000 passengers in 1999.

- The airline most likely to bump a passenger in 2000: Trans World (2.54).
- The airline least likely to bump a passenger in 2000: Delta (0.33).
- The second quarter of 2000 (April June) was the worst at 1.22 per 10,000.
- The first quarter of 2000 (January March) was the best at 0.90 per 10,000.

Consumer Complaints:

On average, the Department of Transportation received 2.98 consumer complaints per 100,000 passengers for the ten major carriers in 2000. The volume of complaints in 2000 represents a 24.5% increase in the rate of complaints over 1999 for the 10 major carriers. These complaints represent a wide range of areas, such as cancellations, delays, oversales, reservation and ticketing problems, fares, refunds, customer treatment, unfair advertising, and other general problems.

- Airline with the highest complaint rate: America West (7.51).
- Airline with the lowest complaint rate: Southwest (0.47).
- August was the month with the highest complaint rate (4.56).
- December (2.01) had the lowest monthly rate for the ten major carriers.

Airline Safety:

In 2000, there were 88 passenger deaths for the major (Part 121) airlines. These 10 airlines experienced 49 accidents in 2000, compared to 35 accidents (and 228 deaths) in 1999. Also, one flight attendant was killed in 2000 during an emergency deplanement. No passenger deaths were recorded in 1998 or 1997, but one ground crew member was killed during passenger operations in each year. In 1996, the major airlines experienced 22 accidents and 232 deaths (this does not reflect the 110 fatalities in the Valuejet accident since it is not considered a major carrier). For 1995, major airlines experienced 19 accidents and 3 deaths. In 1994, these airlines experienced 20 accidents and 239 deaths. As can be seen, the year to year statistics vary greatly.

National and Regional carriers (Part 135) registered 5 fatalities in 2000 with 12 accidents being reported, compared to 12 fatalities and 18 accidents reported in 1999. No fatalities were recorded in 1998, with eight accidents being reported. In 1997 these carriers experienced 46 fatalities, with 29 of these occurring on the Comair Airlines accident in January 1997. In 1996 this group of carriers experienced only one fatal crash with 14 fatalities.

General aviation accident numbers were lower in 2000 (1,835) than in 1999 (2,055). With the lower overall number of accidents, fatalities were also lower in 2000 (592) than in 1999 (670). In 2000, about 1 in 5 (341 of the 1,835) general aviation accidents involved a fatality.

Airline Quality Rating Criteria Overview

The individual criteria used to calculate the AQR scores are summed up in four basic areas that reflect customer-oriented areas of airline performance. Definitions of the four areas used in this AQR 2001 (2000 data) are outlined below.

OT ON-TIME PERFORMANCE (+8.63)

Regularly published data regarding on-time arrival performance is obtained from the U.S. Department of Transportation's *Air Travel Consumer Report*. According to the DOT, a flight is counted "on time" if it is operated within 15 minutes of the scheduled time shown in the carriers' Computerized Reservations Systems. Delays caused by mechanical problems are counted as of January 1, 1995. Canceled and diverted operations are counted as late. The AQR calculations use the percentage of flights arriving on time for each airline for each month.

DB INVOLUNTARY DENIED BOARDINGS (-8.03)

This criterion includes involuntary denied boardings. Data regarding denied boardings could be obtained from the U.S. Department of Transportation's *Air Travel Consumer Report*. Data includes the number of passengers who hold confirmed reservations and are involuntarily denied boarding on a flight that is oversold. These figures include only passengers whose oversold flight departs without them onboard. The AQR uses the ratio of involuntary denied boardings per 10,000 passengers boarded by month.

MB MISHANDLED BAGGAGE REPORTS (-7.92)

Regularly published data regarding consumer reports to the carriers of mishandled baggage can be obtained from the U.S. Department of Transportation's *Air Travel Consumer Report*. According to the DOT, a mishandled bag includes claims for lost, damaged, delayed, or pilfered baggage. Data is reported by carriers as to the rate of mishandled baggage reports per 1,000 passengers and for the industry. The AQR ratio is based on the total number of reports each major carrier received from passengers concerning lost, damaged, delayed, or pilfered baggage per 1,000 passengers served.

CC CONSUMER COMPLAINTS (-7.17)

The criteria of consumer complaints is made up of 12 specific complaint categories (outlined below) monitored by the U. S. Department of Transportation and reported monthly in the *Air Travel Consumer Report*. Consumers can file complaints with the DOT in writing, by telephone, via e-mail, or in person. The AQR uses complaints about the various categories as part of the larger customer complaint criteria and calculates the consumer complaint ratio on the number of complaints received per 100,000 passengers flown.

CONSUMER COMPLAINT CATEGORIES

Flight Problems

Data is available by the total number of consumer complaints pertaining to cancellations, delays, or any other deviations from schedule, whether planned or unplanned for each airline each month.

Oversales

This complaint category includes all bumping problems, whether or not the airline complied with DOT oversale regulations. Data is available by the total number of consumer complaints pertaining to oversales for each airline each month.

Reservations, Ticketing, and Boarding

This category includes airline or travel agent mistakes in reservations and ticketing, problems in making reservations and obtaining tickets due to busy telephone lines, or waiting in line or delays in mailing tickets, and problems boarding the aircraft (except oversales). Data is available by the total number of consumer complaints pertaining to ticketing and boarding for each airline each month.

Fares

As defined by the DOT, consumer complaints about fares include incorrect or incomplete information about fares, discount fare conditions and availability, overcharges, fare increases, and level of fares in general. Data is available for the total number of consumer complaints pertaining to fares for each airline each month.

Refunds

This category includes customer complaints about problems in obtaining refunds for unused or lost tickets, fare adjustments, or bankruptcies. Data is available by the total number of consumer complaints pertaining to refunds for each airline each month.

Baggage

Claims for lost, damaged, or delayed baggage, charges for excess baggage, carry-on problems, and difficulties with airline claim procedure are included in this category. Data is available by the total number of consumer complaints pertaining to baggage for each airline each month.

Customer Service

This category includes complaints about rude or unhelpful employees, inadequate meals or cabin service, and treatment of delayed passengers. Data is available by the total number of consumer complaints pertaining to customer service for each airline each month.

Disability

Previously included as part of the Reservations, Ticketing and Boarding Category (thru 6/99), this category includes complaints about civil rights complaints by air travelers with disabilities. Data is available by the total number of consumer complaints pertaining to disabilities for each airline each month.

Advertising

These are complaints concerning advertising that is unfair, misleading or offensive to consumers. Data is available by the total number of consumer complaints regarding advertising for each airline each month.

Tours

This category includes complaints about problems with scheduled or charter tour packages. Data is available by the total number of consumer complaints pertaining to tours for each airline each month.

Animals

This category, added in October 2000, tracks customer complaints about loss, injury, or death of an animal during air transport by an air carrier. Data is available by the total number of customer complaints regarding animals for each airline each month.

Other

Data regarding consumer complaints about frequent flyer programs, smoking, credit, cargo problems, security, airport facilities, claims for bodily injury, and other problems not classified above are included in this category. Smoking and credit elements, previously separate elements, were added to this general category as of 9/99. Data is available by the total number of consumer complaints regarding other problems for each airline each month.